CLAIMS

What is claimed is:

1. A testing method comprising the steps of:

identifying a plurality of hosts located within a plurality of grids of a grid environment, wherein each host is a software object;

associating a ghost agent with each identified host; replicating actions of said host for use by said associated ghost agents; recording data relating to said replicated actions; generating test input from said recorded data; and, testing within said grid environment using said test input.

2. The method of claim 1, wherein said replicated actions are passive actions, said method further comprising the step of:

preventing said replicated actions from operationally executing in said grid environment.

3. The method of claim 1, further comprising the steps of:

moving selective ones of said hosts from location to location within said grid environment; and,

responsively moving said ghost agents in accordance with movement of said hosts.

- 4. The method of claim 1, further comprising the steps of: determining operational metrics for at least one component to be tested; modifying said test input based upon said operational metrics.
- 5. The method of claim 1, wherein said hosts are disposed within a production segment of said grid environment and wherein said testing is performed within a test segment of said grid environment.
- 6. The method of claim 5, further comprising the steps of:

inputting said test input into at least one ghost agent; and,

executing actions within said test segment based upon said ghost agent that received said test input.

- 7. The method of claim 6, further comprising the steps of:
 deploying ghost agents within said test segment of said grid environment; and,
 recording data relating to said testing using said deployed ghost agents.
- 8. The method of claim 1, wherein said hosts are associated with a specific application, wherein said testing is conducted for said application.
- The method of claim 8, further comprising the step of:
 determining system requirements for said application based at least in part upon
 output from said testing.
- 10. The method of claim 8, said method further comprising the steps of: gathering usage data for at least one different application using ghost agents.
- 11. The method of claim 10, said method further comprising the steps of:
 testing said specific application while simultaneously simulating load conditions
 resulting from said at least one different application.
- 12. A system for testing applications within a grid environment wherein said grid environment comprises a production segment and a test segment, said system comprising:
- a host configured to execute actions within said production segment, wherein said host can move from one grid location to another grid location; and,
- a ghost agent configured to record data related to said actions executed by said host, wherein said recorded data is used to simulate user interactions within said test segment.

- 13. The system of claim 11, wherein said ghost agent is further configured to responsively move in accordance with movement of said host.
- 14. The system of claim 11, further comprising:
 - a different host configured to execute actions within said test segment;
- a different ghost agent configured to record data related to actions executed by said host of said test segment.
- 15. The system of claim 14, further comprising:
- a ghost agent configured to trigger said different host in said test segment to execute said actions based upon data recorded by said ghost agent in said production segment.
- 16. A ghost agent comprising:
- a ghost log configured to record data related to actions executed by a host, wherein said host is a software object;
- a ghost identifier configured to identify said ghost agent to components within a grid environment; and,
- a ghost controller for managing interactions between said ghost agent and said grid environment, wherein said ghost agent can move from location to location within said grid environment, wherein said ghost agent is used to test grid-based applications.
- 17. The ghost agent of claim 16, further comprising:a means for generating test input using said ghost agent.
- 18. The ghost agent of claim 16, further comprising:
 means for simulating user actions during tests using said ghost agent.
- 19. The ghost agent of claim 16, further comprising:means for generating test output using said ghost agent.

20. A machine-readable storage having stored thereon, a computer program having a plurality of code sections, said code sections executable by a machine for causing the machine to perform the steps of:

identifying a plurality of hosts located within a plurality of grids of a grid environment, wherein each host is a software object;

associating a ghost agent with each identified host; replicating actions of said host for use by said associated ghost agents; recording data relating to said replicated actions; generating test input from said recorded data; and, testing within said grid environment using said test input.

21. The machine-readable storage of claim 20, wherein said replicated actions are passive actions, said machine-readable storage further comprising the step of:

preventing said replicated actions from operationally executing in said grid environment.

22. The machine-readable storage of claim 20, further comprising the steps of:

moving selective ones of said hosts from location to location within said grid environment; and,

responsively moving said ghost agents in accordance with movement of said hosts.

- 23. The machine-readable storage of claim 20, further comprising the steps of: determining operational metrics for at least one component to be tested; modifying said test input based upon said operational metrics.
- 24. The machine-readable storage of claim 20, wherein said hosts are disposed within a production segment of said grid environment and wherein said testing is performed within a test segment of said grid environment.
- 25. The machine-readable storage of claim 24, further comprising the steps of:

inputting said test input into at least one ghost agent; and,
executing actions within said test segment based upon said ghost agent that
received said test input.

- 26. The machine-readable storage of claim 25, further comprising the steps of: deploying ghost agents within said test segment of said grid environment; and, recording data relating to said testing using said deployed ghost agents.
- 27. The machine-readable storage of claim 20, wherein said hosts are associated with a specific application, wherein said testing is conducted for said application.
- 28. The machine-readable storage of claim 27, further comprising the step of: determining system requirements for said application based at least in part upon output from said testing.
- 29. The machine-readable storage of claim 27, further comprising the steps of: gathering usage data for at least one different application using ghost agents.
- 30. The machine-readable storage of claim 29, further comprising the steps of: testing said specific application while simultaneously simulating load conditions resulting from said at least one different application.
- 31. A system for testing comprising:

means for identifying a plurality of hosts located within a plurality of grids of a grid environment, wherein each host is a software object;

means for associating a ghost agent with each identified host;
means for replicating actions of said host within each ghost agent;
means for recording data relating to said replicated actions;
means for generating test input from said recorded data; and,
means for testing within said grid environment using said test input.